

# Animal Sciences and Forages

Animal Sciences and Forages

## V(A). Planned Program (Summary)

### 1. Name of the Planned Program

Animal Sciences and Forages

## V(B). Program Knowledge Area(s)

### 1. Program Knowledge Areas and

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
301	Reproductive Performance of Animals	10%	10%		
302	Nutrient Utilization in Animals	20%	20%		
303	Genetic Improvement of Animals	20%	20%		
307	Animal Management Systems	20%	20%		
311	Animal Diseases	20%	20%		
315	Animal Welfare/Well-Being and Protection	10%	10%		
	<b>Total</b>	100%	100%		

## V(C). Planned Program (Inputs)

### 1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	22.6	2.3	0.0	0.0
<b>Actual</b>	23.9	3.8	0.0	0.0

### 2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
<b>Smith-Lever 3b &amp; 3c</b> 497475	<b>1890 Extension</b> 226254	<b>Hatch</b> 0	<b>Evans-Allen</b> 0
<b>1862 Matching</b> 571533	<b>1890 Matching</b> 226254	<b>1862 Matching</b> 0	<b>1890 Matching</b> 0
<b>1862 All Other</b> 3279119	<b>1890 All Other</b> 398525	<b>1862 All Other</b> 0	<b>1890 All Other</b> 0

## **V(D). Planned Program (Activity)**

### **1. Brief description of the Activity**

ETP 11B &dash Sheep, Goat and Rabbit Production

In the North Alabama Area, four regional goat workshops were conducted. The first workshop was held on Saturday, February 3, 2007 at the Dekalb County VFW Fairgrounds in Fort Payne. This workshop focused on meat goat selection and evaluation and on fecal egg count and FAMACHA as management tools in strategic deworming. The second workshop, which was held on Saturday, March 24, 2007 at the Lauderdale County Cooperative Extension Office, focused on reproductive management options such as artificial and laparoscopic insemination and embryo flush and transfer in meat goats. The third workshop, which was held on Thursday, May 31, 2007, took place at the Marshall County VFW Fairgrounds in Boaz. This workshop also focused on fecal egg count and the FAMACHA system as effective tools in the control of gastrointestinal parasites in goats. The fourth workshop, held on Saturday, September 22, 2007 at the Blount County Cooperative Extension Office, focused on the manufacture of cheese and soap from dairy goat milk. All events relied greatly on both seminars and hands-on demonstrations.

>

>

In Southwest Alabama, one particular workshop relied greatly on hands-on training. A large number of meat goat producers from the Blackbelt region were trained on the use of the FAMACHA system and microscopic examination of gastrointestinal parasites. The educational activity, which was held on Thursday, May 17, 2007 at the Perry County Agriculture and Youth Farm in Uniontown, focused on approaches to strategic deworming of goats. The activity provided hands-on training to both adults and youth.

In a series of workshops conducted throughout the state, Extension Animal Scientists housed at Alabama A&M University also provided hands-on training to adults and youth. These specialists gave demonstrations on the flotation or McMaster technique used to identify and count internal parasite eggs, the use of FAMACHA charts, and artificial insemination. Audiences included goat and sheep producers from Alabama, Florida, Georgia, Mississippi and Tennessee, and missionary students from Africa, Asia, Central and South America.

Other activities conducted by educators of the Urban Affairs and New Nontraditional Programs (UANNP) unit of the Alabama Cooperative Extension System (ACES) included producer tours to Tennessee State University's Research Farm in Nashville and Fort Valley State University's Small Ruminant Technology Center in Georgia on Saturday, February 24 and Wednesday, May 9, 2007, respectively. Furthermore, the UANNP unit held its First Annual Spring Small Ruminant Symposium and First Annual Conference on Small Ruminants.

>

>

The First Annual Spring Small Ruminant Symposium was held on Saturday, March 17, 2007 at Alabama A&M University's Agribition Center in Huntsville. The event focused mainly on herd health management and meat quality assurance. The First Annual Conference on Small Ruminants was held on Thursday, August 23 and Friday, August 24, 2007 at Shocco Springs Baptist Conference Center near Talladega. The activity focused mainly on nutrition and grazing management of sheep and goats.

Besides carrying out the previously described outreach activities, UANNP staff lend its expertise to the Goat and Sheep Producers of Alabama and the Small Farms Research Center of Alabama A&M University. The 3rd Annual Goat and Sheep Festival held on Saturday, June 2, 2007 at the MGH Equestrian Arena near Talladega and the 5th Annual Community Outreach Conference held on Thursday, November 15, 2007 at the Holiday Inn Hotel in Huntsville included presentations by UANNP Extension Animal Scientists. These presentations focused on feeding and nutrition, breeding and reproduction, and health management of small ruminants.

### **2. Brief description of the target audience**

ETP 11B &dash Sheep, Goat and Rabbit Production

The primary target audience was meat goat and sheep producers developing profitable, sustainable animal production systems. Secondary target audience was consumers of lamb and goat meat products concerned with dietary cholesterol and other health issues.

**V(E). Planned Program (Outputs)****1. Standard output measures****Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	92000	320000	12000	40000
2007	11559	201291	1239	21573

**2. Number of Patent Applications Submitted (Standard Research Output)****Patent Applications Submitted****Year      Target****Plan:**    0

2007:    0

**Patents listed****3. Publications (Standard General Output Measure)****Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	17	0	17

**V(F). State Defined Outputs****Output Target****Output #1****Output Measure**

- ? This program area will include numerous output activities and methods as part of the Extension Team Projects (ETPs) which are described/explained in the prior "outcome activities and methods sections." The success of many of these outcomes will be formally evaluated/measured by using individual activity evaluation forms designed specifically for each activity, the success of other activities and methods will be measured by the level of participation in the activity. In the target boxes below for each year, we are indicating the number of individual activities within the ETPs for this program area that will be formally evaluated using an evaluation instrument designed specifically for that activity.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	5	9

**V(G). State Defined Outcomes**

O No.	Outcome Name
1	For ETP11J the National Animal Identification Educational Program, the outcome measure will be The number of premises numbers registered for the State of Alabama due to our educational efforts.
2	For ETP11G the Alabama Master Cattle Producer Training Program, the outcome measure will be the number of graduates.
3	Each ACES employee is required to provide a success story on the program activity which they felt best demonstrates the impacts of their work. These success stories contain the following elements: Why: Explain the reason the program was done, or the situation or problem that the program addressed What: Specifically what was done and how it was done. When: If this was a one-time event, the date it occurred. If it is was a series of events, or an on-going program, when it began. Where: Specific location-- the county or counties involved. Who and how many: The "who" includes both who did the program and who were the clients of the program, as well as how many people were served. So what: This is the part that gives the real meaning to "success". The basic question to be answered in this part is "what difference did this program make". The difference may be measured in terms of dollars, or in changes in habits, lifestyles or attitudes. Whenever possible use numbers to show the effect of the program. If it is not possible to use numbers, provide a qualitative measurement like client comments or another type of testimonial about the program. Since this program area is very broad in scope and contains multiple Extension Team Projects which have different outcomes measures, the impacts for this program area are best measured in the number and quality of the success stories generated by the individuals who work on these projects. Therefore, one very significant outcome measure is the number of success stories generated.

**Outcome #1**

**1. Outcome**

For ETP11J the National Animal Identification Educational Program, the outcome measure will be The number of premises numbers registered for the State of Alabama due to our educational efforts.

**2. Associated Institution Types**

- 1862 Extension
- 1890 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	2000	0

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
315	Animal Welfare/Well-Being and Protection
311	Animal Diseases

**Outcome #2**

**1. Outcome**

For ETP11G the Alabama Master Cattle Producer Training Program, the outcome measure will be the number of graduates.

**2. Associated Institution Types**

- 1862 Extension
- 1890 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	200	0

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results****4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
301	Reproductive Performance of Animals
315	Animal Welfare/Well-Being and Protection
302	Nutrient Utilization in Animals
307	Animal Management Systems
311	Animal Diseases
303	Genetic Improvement of Animals

**Outcome #3****1. Outcome**

Each ACES employee is required to provide a success story on the program activity which they felt best demonstrates the impacts of their work. These success stories contain the following elements: Why: Explain the reason the program was done, or the situation or problem that the program addressed What: Specifically what was done and how it was done. When: If this was a one-time event, the date it occurred. If it is was a series of events, or an on-going program, when it began. Where: Specific location-- the county or counties involved. Who and how many: The "who" includes both who did the program and who were the clients of the program, as well as how many people were served. So what: This is the part that gives the real meaning to "success". The basic question to be answered in this part is "what difference did this program make". The difference may be measured in terms of dollars, or in changes in habits, lifestyles or attitudes. Whenever possible use numbers to show the effect of the program. If it is not possible to use numbers, provide a qualitative measurement like client comments or another type of testimonial about the program. Since this program area is very broad in scope and contains multiple Extension Team Projects which have different outcomes measures, the impacts for this program area are best measured in the number and quality of the success stories generated by the individuals who work on these projects. Therefore, one very significant outcome measure is the number of success stories generated.

**2. Associated Institution Types**

- 1890 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Quantitative Target</b>	<b>Actual</b>
2007	6	497

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

ETP 11B - Sheep, Goat and Rabbit Production

Consumer demand for lamb and goat meat is rising and many farmers are raising small ruminants as a way to diversify their products and bring additional income to their operations. Given that there are not enough sheep and goats produced in the U.S., farmers in Alabama have a tremendous potential to expand and supply some of the growing demand for lamb and goat meat. However, to ensure that farmers improve the efficiency of lamb and goat production and enhance their profitability and competitiveness in the national and world markets, educational resources in alternative animal production and technological advances was needed.

### **What has been done**

#### **ETP 11B - Sheep, Goat and Rabbit Production**

In an effort to help Alabama small ruminant producers manage their animals and improve the profitability of their operation, the UANNP unit of ACES provided broadly-based and objective information about small ruminants and their impact on Alabama's economy and natural resources. Besides carrying out an array of outreach events (See Planned Program Activities), UANNP specialists developed 16 new numbered publications on sheep, goats and rabbits. These publications, which are available in print and on our ACES website ([www.aces.edu](http://www.aces.edu)) under Urban Affairs and New Nontraditional Programs (Urban and Nontraditional Animal Science), are listed below:

UNP-0060 Digestive System of Goats  
UNP-0080 Guidelines for Entry into Meat Rabbit Production  
UNP-0081 Ensuring Nutrition for Goats  
UNP-0082 Summer Heat and Rabbit Production  
UNP-0083 Increasing Successful Reproduction Among Goats  
UNP-0085 Caseous Lymphadenitis (CL) in Goats and Sheep  
UNP-0087 Foot Rot and Foot Scald in Goats & Sheep  
UNP-0088 Keratoconjunctivitis (Pinkeye) in Goats  
UNP-0089 Enterotoxemia (Overeating Disease) in Sheep and Goats  
UNP-0090 Vaccination Protocol for a Goat Herd  
UNP-0091 Bacterial Pneumonia in Goats  
UNP-0092 Injection Site Blemishes  
UNP-0096 Direct and Indirect Marketing Options for Small Ruminant Producers  
UNP-0098 Niche Marketing for Small Ruminants  
UNP-0099 Performance Evaluation for Small Ruminants  
UNP-0100 Winter Challenges for Rabbit Producers

Additionally, Extension Animal Scientists housed at Auburn University developed the publication titled "Reproductive Management of Sheep and Goats" (ANR-1316).

### **Results**

#### **ETP 11B - Sheep, Goat and Rabbit Production**

Alabama small ruminant producers have become more knowledgeable and stayed open to new and different management practices that allowed their operations to be more productive and profitable. Registration records showed that a total of 994 sheep and goat producers attended educational activities carried out by ACES. Post surveys indicated that 835 participants (84%) gained knowledge as a result of the educational activities. Moreover, 676 participants (68%) reported improvements in herd health and production efficiency, and 497 participants (50%) reported increases in profitability ranging from 2 to 15%.

The small ruminant industry, in particular the meat goat segment, is one of the fastest growing enterprises of the Alabama agriculture economy. In 2007, there were nearly 48,000 goats in Alabama, more than an 11% increase since 2006.

## **4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
301	Reproductive Performance of Animals
307	Animal Management Systems
303	Genetic Improvement of Animals
311	Animal Diseases
315	Animal Welfare/Well-Being and Protection
302	Nutrient Utilization in Animals

## **V(H). Planned Program (External Factors)**

### **External factors which affected outcomes**

- ? Competing Programatic Challenges

## **Brief Explanation**

ETP 11B – Sheep, Goat and Rabbit Production

Although USDA has certain “ear-marked funds” available for livestock producer groups seeking federal help, goat producers constitute a minority group with few and less vocal supporters. Consequently, they are critically under-represented at decision-making levels.

Goat producers are locally impacted by Extension via its County and Regional Extension Agents, who handle questions, supply information, and conduct training in a wide variety of subject matter areas. To have a statewide comprehensive meat goat program, additional training activities focusing on breeds, feeding, pasture management, parasite control, marketing, and economics must be made available to all interested persons across Alabama. Hence, future plans include promoting participation of other ACES personnel and increasing the number of outreach education activities in South Alabama.

## **V(I). Planned Program (Evaluation Studies and Data Collection)**

### **1. Evaluation Studies Planned**

- ? After Only (post program)
- ? During (during program)

### **Evaluation Results**

ETP 11B – Sheep, Goat and Rabbit Production

- Increased knowledge of key production management practices.
- Improved forage management.
- Improved efficiency of production.
- Improved animal health and well-being.
- Increased marketing and profitability.

### **Key Items of Evaluation**

ETP 11B – Sheep, Goat and Rabbit Production

- As a result of the activities, 835 program participants gained knowledge of key production management practices.
- As a result of the activities, 676 program participants observed improved production efficiency.
- As a result of the activities, 676 program participants observed improved animal health and well-being.
- As a result of the activities, 497 program participants reported increased profitability rates ranging from 2 to 15 percent.